

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listings of Claims:

Please Amend the remaining claims as indicated below:

1. (Currently Amended) A radio receiver, comprising: an envelope detector configured to detect the amplitude of a received signal and generate a waveform representative of the envelope of the received signal; and a sign detector comprising a limiter configured to generate a resulting bit stream and circuitry coupled with the limiter, the circuitry configured to detect a double positive, or double negative, in the resulting bit stream, the sign detector configured to determine a sign associated with a data bit encoded on the received signal.

2. (Original) The radio receiver of claim 1, further comprising a filter coupled with the envelope detector, the filter configured to filter the waveform generated by the envelope detector.

3. (Original) The radio receiver of claim 2, further comprising an analog-to-digital converter coupled to the filter, the analog-to-digital converter configured to convert the filtered waveform to a digital signal.

4. (Original) The radio receiver of claim 2, wherein the filter is a low pass filter.

5. (Original) The radio receiver of claim 4, wherein the filter is further configured to provide DC removal for the waveform.

6. (Canceled).

7. (Canceled).

8. (Currently Amended) A receiver, comprising: an antenna configured to receive a RF signal; a filter coupled to the antenna, the filter configured to filter the received RF signal; a amplifier coupled with the filter, the amplifier configured to amplify the filtered RF signal; and a radio receiver coupled with the amplifier, the radio receiver comprising: an envelope detector configured to detect the amplitude of a received signal and generate a waveform representative of the envelope of the received signal; and a sign detector comprising a limiter configured to generate a resulting bit stream and circuitry coupled with the limiter, the circuitry configured to detect a double positive, or double negative, in the resulting bit stream, the sign detector configured to determine a sign associated with each data bit encoded on the received signal.

9. (Currently Amended) The receiver of claim 8, wherein the radio receiver further comprises a filter coupled with the envelope detector, the filter of the radio receiver configured to filter the waveform generated by the envelope detector.

10. (Currently Amended) The receiver of claim 9, wherein the radio receiver further comprises an analog-to-digital converter coupled to the filter of the radio receiver, the analog-to-digital converter configured to convert the filtered waveform to a digital signal.

11. (Currently Amended) The receiver of claim 9, wherein the filter of the radio receiver is a low pass filter.

12. (Currently Amended) The receiver of claim 11, wherein the filter of the radio receiver is further configured to provide DC removal for the waveform.

13. (Canceled).

14. (Canceled).

15. (Original) The receiver of claim 8, wherein the amplifier is a low noise amplifier.

16. (Original) The receiver of claim 8, wherein the filter coupled to the antenna is a band pass filter.

17. (Currently Amended) The receiver of claim 108, further comprising baseband circuitry configured to receive the digital signal from the analog-to-digital converter and sign information from the sign detector and to decode the data bits base based on the don't care digital signal and sign information.

18-24 (Canceled).

25. (Currently Amended) A radio receiver, comprising: a band pass filter configured to filter a combined signal; a clocked comparator coupled with the band pass filter, the clocked comparator configured to compare the filter combined signal to a ground reference when the comparator is enabled by a clock signal; a digital-to-analog converter coupled with the clocked comparator, the digital-to-analog converter

configured to convert the output of the clocked comparator to an analog signal; ~~and a~~ combiner configured to receive a RF signal and combine ~~it the RF signal~~ with the analog signal generated by the digital-to-analog converter in order to generate the combined signal; and a plurality of clocked comparators coupled to the band pass filter, each of the clocked comparators configured to be activated on a different phase of a clock signal and a combiner coupled to the plurality of clocked comparators, the combiner configured to combine the outputs of the clocked comparators.

26. (Original) The radio receiver of claim 25, further comprising filtering and decimation circuitry configured to filter and decimate the output of the clocked comparator.

27. (Original) The radio receiver of claim 25, further comprising a clock signal configured to clock the clocked comparator at a rate required to achieve a selected effective number of bits at the output of the filtering and decimation circuitry.

28. (Original) The radio receiver of claim 25, wherein the combiner is a passive combiner.

29. (Canceled).

30. (Currently Amended) The radio receiver of claim 2529, wherein the digital-to-analog converter is coupled to the plurality of clocked comparators via the combiner.

31. (Currently Amended) A receiver, comprising: an antenna configured to receive a RF signal; a filter coupled to the antenna, the filter configured to filter the

received RF signal; an amplifier coupled with the filter, the amplifier configured to amplify the filtered RF signal; and a radio receiver, comprising: a band pass filter configured to filter a combined signal; a plurality of clocked comparators coupled with the band pass filter, the clocked comparators configured to compare the filter combined signal to a ground reference when the each comparator is enabled by a clock signal, and wherein each of the clocked comparators configured to be activated on a different phase of the clock signal; a combiner coupled to the plurality of clocked comparators, the combiner configured to combine the outputs of the clocked comparators; a digital-to-analog converter coupled with the clocked comparators), the digital-to-analog converter configured to convert the output of the clocked comparators to an analog signal; and a combiner configured to receive the amplified and filtered a RF signal and combine the amplified and filtered RF signal it with the analog signal generated by the digital-to-analog converter in order to generate the combined signal.

32. (Original) The receiver of claim 31, wherein the radio receiver further comprises filtering and decimation circuitry configured to filter and decimate the output of the clocked comparator.

33. (Original) The receiver of claim 31, wherein the radio receiver further comprises a clock signal configured to clock the clocked comparator at a rate required to achieve a selected effective number of bits at the output of the filtering and decimation circuitry.

34. (Original) The receiver of claim 31, wherein the combiner is a passive combiner.

35. (Canceled).

36. (Currently Amended) The receiver of claim 3135, wherein the digital-to-analog converter is coupled to the plurality of clocked comparators via the combiner.

37. (Canceled).

38. (Canceled).